

Supplementary materials

Enhanced electrical properties of lead-free sodium potassium niobate piezoelectric ceramics prepared via cold sintering assisted sintering

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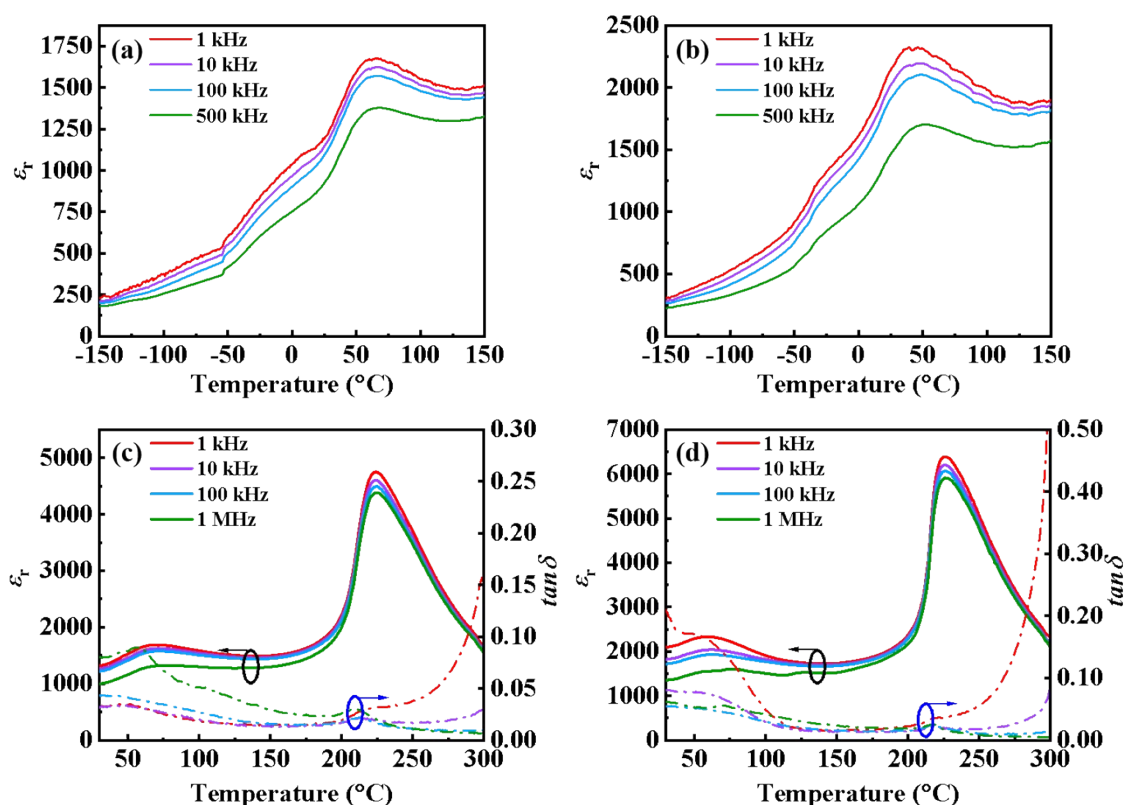


Figure S1. Temperature dependences of permittivity of (a) CS-1120 and (b) CSAS-1120 ceramics from -150 to 150 °C; temperature dependences of dielectric loss and permittivity of (c) CS-1120 and (d) CSAS-1120 ceramics from 30 to 300 °C.

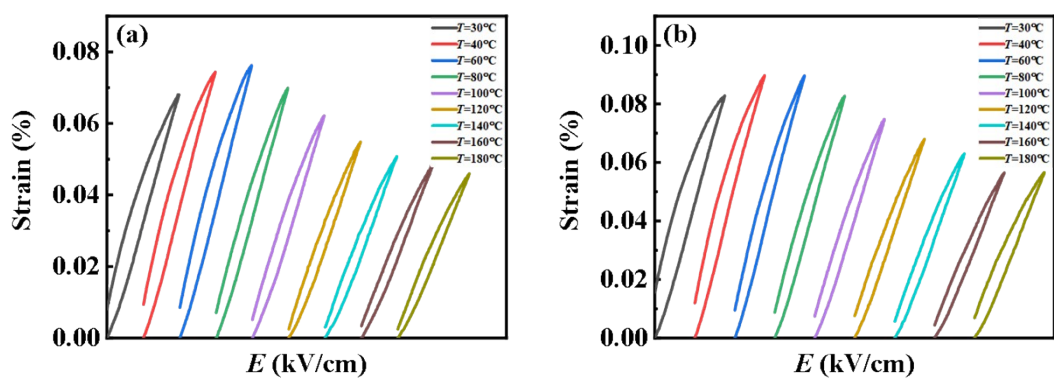


Figure S2. Temperature dependent unipolar S - E curves of the ceramics with
(a) CS-1120 (b) CSAS-1120.

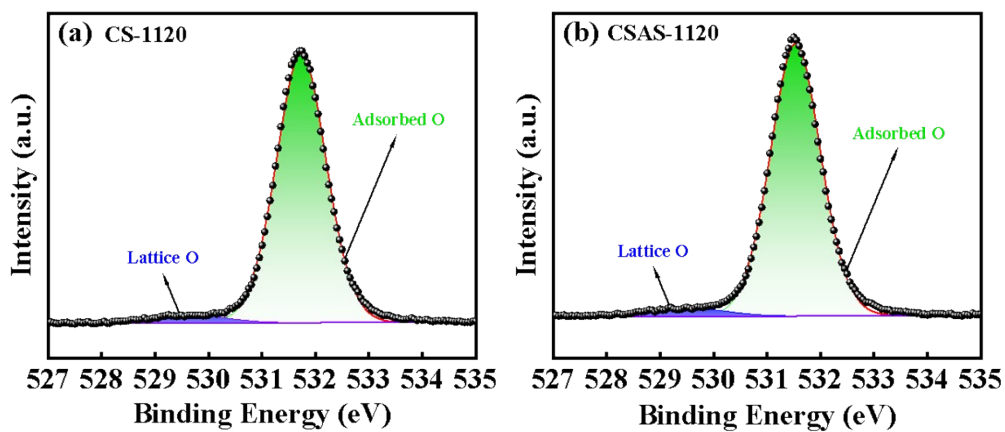


Figure S3. XPS spectra of O1s of (a) CS-1120, (b) CSAS-1120.